



International Atomic Energy Agency

INFORMATION CIRCULAR

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17 April 1972

GENERAL Distr.

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THE TEXT OF THE AGREEMENT CONNECTED WITH THE AGENCY'S
ASSISTANCE TO PAKISTAN IN FURTHERING
PROJECTS BY THE SUPPLY OF MATERIALS

Supplementary Agreement No. 1

The text [1] of the Supplementary Agreement No. 1 to the Master Agreement between the Agency and the Government of Pakistan for assistance by the Agency in furthering projects by the supply of materials [2] is reproduced herein for the information of all Members. The Supplementary Agreement entered into force on 16 November 1971.

[1] The footnotes to the text have been added in the present information circular.

[2] Reproduced in document INFCIRC/150.

SUPPLEMENTARY AGREEMENT No. 1 TO THE MASTER AGREEMENT BETWEEN
THE INTERNATIONAL ATOMIC ENERGY AGENCY AND THE GOVERNMENT OF
PAKISTAN FOR ASSISTANCE BY THE AGENCY IN FURTHERING PROJECTS
BY THE SUPPLY OF MATERIALS

WHEREAS the International Atomic Energy Agency (hereinafter the "Agency") and the Government of Pakistan (hereinafter the "Government") on 27 February 1970 entered into a Master Agreement for Assistance by the Agency in Furthering Projects by the Supply of Materials (hereinafter the "Master Agreement") [2];

WHEREAS the Government has proposed two projects for research on atomic energy for peaceful purposes and has requested the assistance of the Agency in the supply of certain materials therefor;

WHEREAS the Government of the United States of America has agreed to supply, through its Atomic Energy Commission (hereinafter the "Commission"), the necessary materials;

NOW, THEREFORE, the Agency and the Government hereby agree as follows:

ARTICLE I

The projects to which this Supplementary Agreement relates are:

- (a) The measurements of fission cross-sections, total neutron cross-sections and neutron inelastic scattering cross-sections at the Atomic Energy Centre, Dacca, East Pakistan; and
- (b) Neutron capture gamma ray studies and fission group studies at the Pakistan Institute of Nuclear Science and Technology, Rawalpindi, West Pakistan.

ARTICLE II

The following materials (hereinafter the "supplied materials") are hereby allocated to the projects:

- (a) 0.1 microgram quantities of californium-252;
- (b) Milligram quantities of natural uranium, plutonium-239 and plutonium-240; and
- (c) Gram quantities of 98.2% enriched uranium, plutonium-239 and plutonium-241.

ARTICLE III

The supplied materials are to be provided by the Commission in accordance with the terms of the Master Contract between the Agency and the Commission for Sales of Research Quantities of Special Nuclear Materials, reproduced in Agency document INFCIRC/83, part II, Annex A, and of Supplemental Contract No. IAEA/S/44 thereto, a copy of which is annexed hereto. Except as specifically provided therein and in this Supplementary Agreement, the provisions of the Master Agreement [2] shall apply.

ARTICLE IV

This Supplementary Agreement shall enter into force upon signature by or for the Director General of the Agency and by the authorized representative of the Government.

For the INTERNATIONAL ATOMIC
ENERGY AGENCY:

(signed) C. A. Rennie

Vienna, 16 November 1971

For the GOVERNMENT OF PAKISTAN

(signed) Enver Murad

Vienna, 5 November 1971

ANNEX

SUPPLEMENTAL CONTRACT OF SALE OF RESEARCH
QUANTITIES OF SPECIAL NUCLEAR MATERIALS

The International Atomic Energy Agency (hereinafter referred to as the "Purchaser") agrees to purchase from the United States Atomic Energy Commission (hereinafter referred to as the "Seller"), acting for and on behalf of the United States of America, and the Seller agrees to sell to the Purchaser the following described material pursuant to the terms of the Master Contract for Sales of Research Quantities of Special Nuclear Materials entered into between the Purchaser and the Seller on 20 August 1962 [3].

ITEM OF MATERIAL

CHARGES

For PINSTECH:

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| 1. One (1) ^{252}Cf source, one inch in diameter, consisting of a 0.1 microgram ^{252}Cf deposit on nickel backing having a thickness of 70-100 micrograms per cm^2 . | 1. \$100 for ^{252}Cf , plus \$350 fabrication charge, plus \$25 handling, plus transportation costs. (Note that due to the fragile nature of this source, transportation by commercial conveyance should be avoided unless arrangements are made for mounting source on special backing which would need to be removed at final destination.) |
| 2. Nine grams ^{235}U , in the form of oxide, sealed in a plastic tube. (98.208% ^{235}U to be taken from Batch 120F.) | 2. \$0.11 per mg of ^{235}U , plus \$25 handling, plus transportation. |
| 3. Five grams of plutonium, in the form of oxide, containing approximately 91.5% ^{239}Pu and ^{241}Pu . | 3. \$43.00 per gram of contained ^{239}Pu and ^{241}Pu , plus \$350 preparation and handling, plus transportation charges. |
| 4. 300 mg ^{240}Pu , in the form of oxide, sealed in a plastic tube. (93.76% ^{240}Pu to be taken from Batch Fp-19R.) | 4. \$2.65 per mg of ^{240}Pu , plus \$25 handling, plus transportation. |

For PAEC, Dacca:

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| 5. Two, each, of the following normal uranium targets (material to be taken from research stock on hand at Oak Ridge): | 5. \$15.25/gram of uranium; plus: |
| (a) 0.5 mg/cm^2 deposit on platinum backing 3 cm in diameter (deposit to be about 2 cm in diameter); | (a) \$750 fabrication charge for two targets having 0.5 mg/cm^2 deposit; plus |

[3] Reproduced in document INFCIRC/83, part II, Annex A.

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| <p>(b) 5.0 mg/cm² deposit on platinum backing 3 cm in diameter (deposit to be about 2 cm in diameter).</p> <p>6. Two, each, of the following ²³⁹Pu targets (99.11% ²³⁹Pu to be taken from Batch 454B):</p> <p>(a) 0.5 mg/cm² deposit on platinum backing 3 cm in diameter (deposit to be about 2 cm in diameter);</p> <p>(b) 5.0 mg/cm² deposit on platinum backing 3 cm in diameter (deposit to be about 2 cm in diameter).</p> | <p>(b) \$900 fabrication charge for two targets having 5.0 mg/cm² deposit, plus \$25 handling, plus transportation.</p> <p>6. \$0.60/mg ²³⁹Pu; plus:</p> <p>(a) \$750 fabrication charge for two targets having 0.5 mg/cm² deposit; plus</p> <p>(b) \$900 fabrication charge for two targets having 5.0 mg/cm² deposit, plus \$25 handling, plus transportation.</p> |
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NOTE: In addition to the above-mentioned charges, there will be a \$60 handling charge for each returnable USAEC container used in packaging any of the above items, plus \$12.50 for each additional item packaged in such returnable container plus \$20/day rental charge for each such container not returned to the USAEC within thirty (30) days from the date of receipt by the consignee.

Delivery instructions:

To be provided by the Government of Pakistan.

Deliver to:

A representative of the Government of Pakistan to be designated by the Government of Pakistan to act on behalf of the Agency in accepting this material.

Delivery date:

As soon as possible and to be indicated by the Seller to the Government of Pakistan as well as to the Purchaser.

Bill to:

International Atomic Energy Agency

Through:

Port of New York

For the UNITED STATES ATOMIC ENERGY COMMISSION, ACTING FOR AND ON BEHALF OF THE GOVERNMENT OF THE UNITED STATES OF AMERICA:

For the INTERNATIONAL ATOMIC ENERGY AGENCY:

(signed) Dixon B. Hoyle

(signed) C.A. Rennie

7 December 1971

16 November 1971